

ABSTRACT

A tire pressure monitoring system (10) including a magnetic actuator (11) having an air pressure transducer therein for generating a signal proportional to the interior tire air pressure. The actuator (11) operates parallel to the axle to alleviate speed sensitivity. Magnetic actuator (11) communicates with a stationary field sensor (12) permanently mounted on the vehicle at a close proximity to the magnetic actuator (11). The magnetic actuator (11) rotates about the axis with the wheel (15), and for every revolution of the wheel (15), comes in to close proximity to the sensor (12) at least once, and communicates information about the internal tire pressure to the driver.